

GOVERNMENT OF INDIA
MINISTRY OF EDUCATION
DEPARTMENT OF SCHOOL EDUCATION & LITERACY

LOK SABHA
UNSTARRED QUESTION NO. 1372
ANSWERED ON 28.07.2025

Employable Skills in School Education

1372. Shri Dharambir Singh:
Dr. Thirumaavalavan Tholkappiyan:

Will the Minister of *Education* be pleased to state:

- (a) whether the Government proposed/formulated to integrate practical, hands-on, and industry-aligned learning modules from Class 1 to 12 to nurture innovation and employable skills in school education, if so, the details thereof;
- (b) whether there is any proposal to introduce courses enabling students to develop software, electronics or manufacturing skills while in school, if so, the details thereof;
- (c) the details of pilot programmes, if any, are being run to teach AI, robotics, coding, or product design in government schools;
- (d) whether any collaboration with local industries and ed-tech startups is being encouraged to promote experiential learning, if so, the details thereof;
- (e) the details of the increase in employment generation due to such implementation with statistical data; and
- (f) whether any model schools in aspirational districts like Bhiwani, Mahendragarh, Charkhi Dadri, or Nuh are selected for such practical education initiatives and if so, the details thereof?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF EDUCATION
(SHRI JAYANT CHAUDHARY)

- (a) The Government of India has taken significant steps to integrate practical, hands-on learning through activities and projects from Classes 1 to 8, and industry-aligned vocational subjects from Classes 9 to 12 as part of its commitment under the National Education Policy (NEP) 2020. National Education Policy 2020 recommends that all students participate in a 10-day bagless period during Grades 6-8 where they intern with local experts such as carpenters, gardeners, potters, artists, etc. In pursuance of this recommendation, the Government in consultation with concerned stakeholders has developed guidelines for 10 bagless days, aiming at providing children of classes 6-8 an exposure to skill education using experiential learning pedagogy and to make learning at schools joyful and stress free.

The Department of School Education and Literacy is implementing the Centrally Sponsored scheme of Samagra Shiksha. Vocational Education is one of the components under Samagra Shiksha scheme, under which financial assistance is provided to States/UTs for giving exposure to Skill Education to students of Grades 6 to 8 and introduction of Skill courses from Grades 9 to 12, which are aligned with National Skills Qualifications Framework (NSQF). At the Secondary level i.e., Class IX and X, skill modules are offered to the students as an additional subject. At Sr. Secondary level, i.e., Class XI and XII, skill courses are offered as a compulsory (elective) subject. So far 138 Job Roles (JRs) / Skill subjects have been approved to be offered to class 9 to class 12 school students. Employability Skill module has been included in the curriculum of Job Roles which includes Communication Skills, Self-Management Skills, Information and Communication Technology Skills, Entrepreneurship Skills, and Green Skills.

In coordination with the Ministry of Skill Development and Entrepreneurship, the Department of School Education and Literacy is implementing PMKVY 4.0 in the school education sector. For instance, 350 Kendriya Vidyalayas (KVs) have already been onboarded for providing Skill training to In-School/Out of school youth under PMKVY 4.0. for promoting skill development in schools, aiming to equip students for the demands of 21st century knowledge economy.

Under the aegis of the Ministry of Education's Innovation Cell (MIC), the School Innovation Council (SIC) has been established in over 21,700+ schools across the country. The primary goal of SIC is to institutionalize a culture of innovation, entrepreneurship, critical thinking, and IP commercialization among students from Class 6 to 12, with activities adaptable for even younger grades, as per the school's capacity.

(b) Under 138 approved NSQF-aligned Job Roles (JRs), various job roles in the sectors of Information Technology, Electronics, and Manufacturing have been introduced for Grades 9 to 12. These include:

Software & IT: Junior Software Developer, Data Entry Operator, CRM Domestic Voice, Artificial Intelligence Assistant, Web Developer, Cyber Security Associate, Cloud Computing Associate.

Electronics & Hardware: Field Technician – AC, CCTV Installation Technician, Drone Service Technician, Solar PV Installer, Home Appliance Technician.

Manufacturing & Civil Works: Draughtsperson (Mechanical/Civil), Assistant Mason, Construction Painter, Brick Mason.

(c) Several pilot programmes are being run to teach AI, robotics, coding, or product design in government schools. These include Samagra Shiksha-funded project, under which some states like Delhi, Maharashtra, Kerala, Goa, Haryana, Himachal Pradesh, Madhya Pradesh, have initiated state-specific pilots offering robotics and coding classes using tablets, microcontrollers, and low-cost computing kits. Madhya Pradesh is offering AI-based course in 42 schools under the pilot project. CBSE has also introduced AI as a skill subject in classes 9-12 from 2019-20 onwards.

Under Atal Innovation Mission (AIM) by NITI Aayog, Atal Tinkering Labs (ATLs) have been established in schools to promote STEM (Science, Technology, Engineering and Mathematics), robotics, electronics, and 3D printing.

(d) The Government encourages collaboration with local industries, MSMEs, and ed-tech startups to promote experiential and skill-based learning. Under the Vocational Education component of Samagra Shiksha scheme, the Government provides financial support for engaging resource persons including Skill Knowledge Providers, Guest Faculty, including skilled, semi- skilled rural artisans and crafts persons. There is also provision for funding industry visits, and on the job training to school students.

AICTE is making concerted efforts towards skill development and integration with its technical programs. It is collaborating with various industries and institutes to design skill development courses in online mode that are integrated into the regular curriculum. These courses are aimed at enhancing the practical skills of students and making them more employable.

(e) Data available with the All-India Council for Technical Education (AICTE) indicates an upward trend in student placements at the technical education level. As per self-disclosed information by AICTE-approved institutions, the number of diploma-level students placed increased from 1,80,866 in the financial year 2023–24 to 1,91,801 in 2024–25. Similarly, at the undergraduate level, placements have risen from 4,10,843 in 2023–24 to 4,71,227 in 2024–25.

(f) The State of Haryana has included model schools in aspirational districts such as Bhiwani, Mahendragarh, Charkhi Dadri, and Nuh under the Skill Education Scheme to impart practical training to students and their details may be seen at Annexure.

Annexure**ANNEXURE REFERRED TO IN REPLY TO PART (f) OF LOK SABHA UNSTARRED QUESTION NO. 1372 ANSWERED ON 28TH JULY, 2025 ASKED BY SHRI DHARAMBIR SINGH AND DR. THIRUMAAVALAVAN THOLKAPPIYAN, HON'BLE MEMBERS OF PARLIAMENT REGARDING "EMPLOYABLE SKILLS IN SCHOOL EDUCATION"**

Sr. No.	District	School Name	Sector/Skill-1	Sector/Skill-2	Sector/Skill-3
1	BHIWANI	VSSIS GMSSSS TOSHAM	IT/ITeS	BFSI	NA
2	BHIWANI	GMSSSS SIWANI MANDI	Automotive	Healthcare	NA
3	BHIWANI	GMSSSS BAWANI KHERA	IT/ITeS	Automotive	NA
4	BHIWANI	GMSSSS LOHARU	Private Security	Automotive	NA
5	BHIWANI	GMSSSS BHIWANI	Retail	Automotive	NA
6	BHIWANI	GMSSSS DULHERI	IT/ITeS	Healthcare	Beauty and Wellness
7	BHIWANI	GMSSSS JHUMPA KHURD	IT/ITeS	Healthcare	NA
8	CHARKHI DADRI	PM SHRI GMSSSS BAUND KALAN	IT/ITeS	Retail	NA
9	CHARKHI DADRI	GMSSS CHARKHI DADRI	Physical Education	Healthcare	NA
10	CHARKHI DADRI	GMSSSS BADHRA	Retail	IT/ITeS	NA
11	MAHENDRAGARH	GMSSSS ATELI	IT/ITeS	BFSI	NA
12	MAHENDRAGARH	GMSSSS DHANAUNDA	IT/ITeS	Healthcare	Beauty and Wellness
13	MAHENDRAGARH	GMSSSS DHOLERA	Beauty and Wellness	Healthcare	NA
14	MAHENDRAGARH	GMSSSS KANINA	IT/ITeS	Healthcare	NA
15	MAHENDRAGARH	GMSSSS NARNAUL	Beauty and Wellness	Healthcare	NA
16	MAHENDRAGARH	GMSSSS SATNALI	IT/ITeS	Apparels, Made ups and Home Furnishing	NA
17	MAHENDRAGARH	GMSSSS SIHMA	IT/ITeS	BFSI	NA
18	MAHENDRAGARH	GMSSSS MAHENDERGARH	Beauty and Wellness	Healthcare	NA
19	NUH	GMSSSS TAURU	IT/ITeS	Private Security	Automotive
20	NUH	GMSSSS SAROLI	IT/ITeS	Healthcare	NA
21	NUH	GMSSSS NAGINA	IT/ITeS	Automotive	NA
22	NUH	GMSSSS DOHA	Agriculture	Automotive	NA
23	NUH	GMSSSS RANIYALA	Automotive	Retail	NA
24	NUH	GMSSSS NUH	Agriculture	Physical Education	NA
